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Study of the community high school...

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A STUDY OF THE COMMUNITY HIGH SCHOOL WITH ESPECIAL
REFERENCE TO THE COMMUNITY HIGH
SCHOOLS OF ILLINOIS

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BY

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A. B. University of Illinois, 1919

THESIS

Submitted in Partial Fulfillment of the Requirements for the

Degree of

MASTER OF ARTS

IN

EDUCATION

IN THE GRADUATE SCHOOL

OF THE

UNIVERSITY OF ILLINOIS

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THE GRADUATE SCHOOL

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I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY
SUPERVISION BY Lewis Washington Ragland
ENTITLED A Study of The Community High School With
Especial Reference to the Community High Schools of Illinois
BE ACCEPTED AS FULFILLING THIS PART OF THE REQUIREMENTS FOR
THE DEGREE OF Master of Arts in Education

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INTRODUCTION

The community high school movement is of great educational importance to the state of Illinois. Probably no other state has witnessed such a rapid development in fully recognized high schools in recent years. It means new opportunities and better opportunities for the masses of young people in the rural communities. Instead of taking the pupils to educational centers it takes educational centers to them. It is not only extending help to those of school age, but it offers advantages to those beyond school age. What has been achieved in this movement and its possible achievements warrant our attention.

NEED OF THE STUDY

(a) In most cases when community high schools are organized they are put under the control of boards of education who have had little or no experience in dealing with high schools. Naturally they feel keenly the need of direction in methods of procedure. The lack of such direction in ready and brief workable form has caused many mistakes that otherwise might have been avoided.

(b) This is an age looking toward efficiency. When people invest large sums of money in school systems, they are anxious for just returns. They wish to know also whether or not the school is properly adjusted to the community needs. There is need for methods of determining these things.

AIM OF THESIS

The aim of the thesis is as follows:

In Part I -

- (a) To attempt to develop out of past experience the best possible plan of procedure to be used by boards of education for the development of community high school districts, and to set up standards, so far as possible, out of the best practices in existing community high schools, and best architectural practice.
- (b) To attempt to make the above plan a method to be used for checking up or surveying an existing school system for the purpose of bringing it to its highest efficiency.

It is not the purpose of this thesis to discuss all items indicated, but the outline would be incomplete without them, and they are included in order that they may receive the attention of school boards. To a number of them references are given where discussion may be found.

In Part II -

To show the effectiveness of the application of the outline in surveying an existing community high school.

In Part III -

To emphasize the value of the outline and give additional suggestions, by calling in expert advice.

SOURCES OF MATERIAL

The author acknowledges the following sources for his material:

Manuals and questionnaires from the most efficient community high schools of Illinois; suggestions and standards furnished through the kindness of the office of J. W. Royer, architect, Urbana, Illinois; Thirteenth Yearbook of the National Society for the Study of Education, Part II; Methods and Standards for Local School Surveys, by Don C. Bliss; The Survey of the Public Schools of Springfield, Illinois, directed by Leonard P. Ayres; Expert Survey of Public School System, Boise, Idaho, by Elliott, Judd, and Strayer; Recognized High Schools of Illinois, Circular No. 135; High School Manual, University of Illinois, 1918; Director, Standards, and Statistical Analysis of the North Central Association, 1918; Bulletin No. 9, Board of Vocational Education, State of Illinois.

PART I

AN OUTLINE FOR DEVELOPMENT GUIDE, AND FOR EDUCATIONAL SURVEY OF¹ A COMMUNITY HIGH SCHOOL

A. Physical Structure of School.

I. Site.

1. Location.
 - a. Accessibility.
 - b. Environment.
2. Drainage.
 - a. Elevation.
 - b. Nature of soil.
3. Size and form.

II. Building.

1. Location.
2. External structure.
3. Internal structure.
 - a. Stairways.
 - b. Corridors.
 - c. Basement.
 - d. Attic.

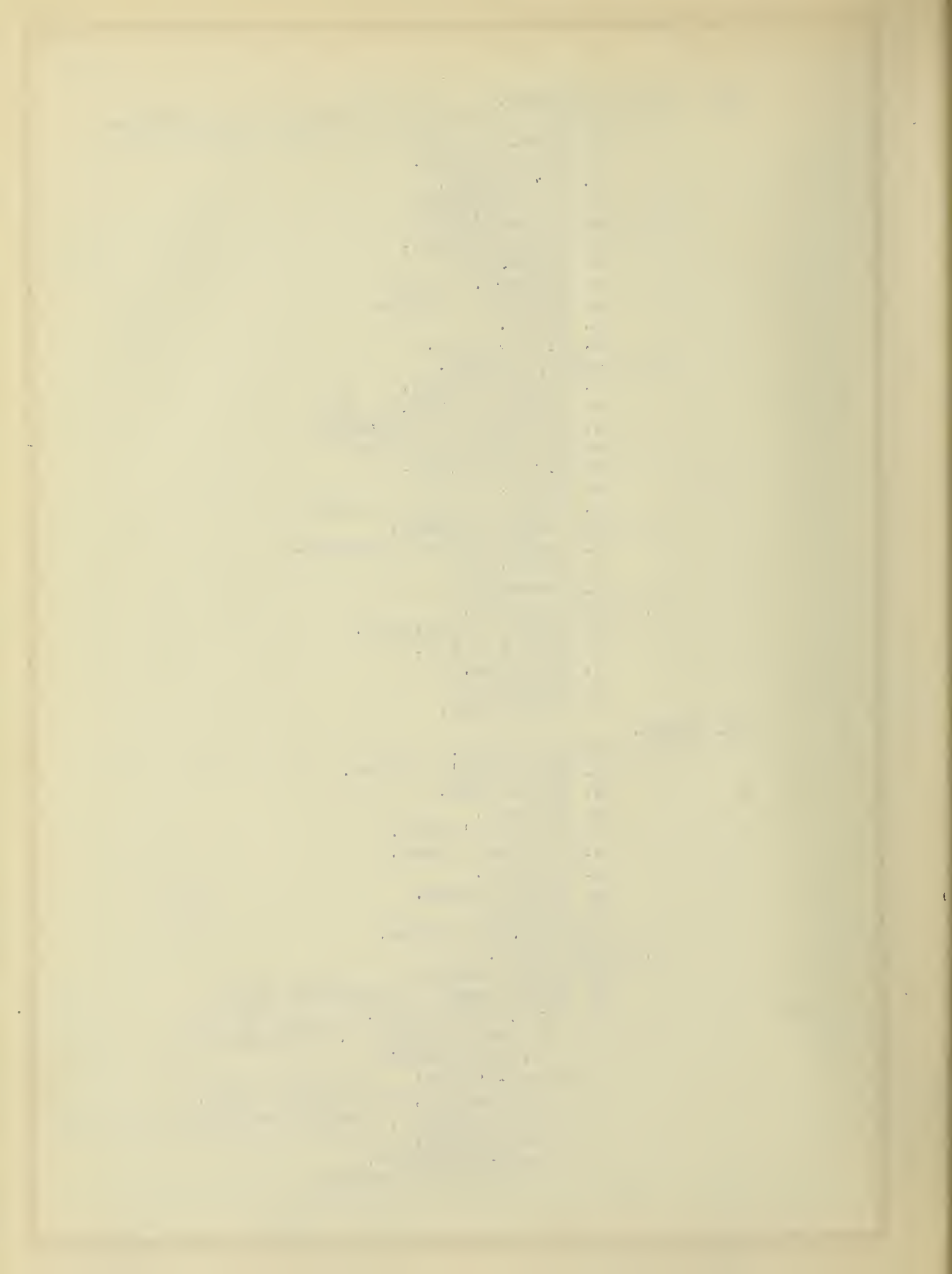
1. This term is meant to include the Township High School.

III. Service Systems.

1. Heating, lighting, and ventilating systems.
 - a. Kind.
 - b. Installation.
 - c. Air supply.
 - d. Distribution.
2. Fire protection.
 - a. Fireproofness.
 - b. Apparatus.
 - c. Escapes.
 - d. Electric wiring.
 - e. Doors.
 - f. Fire drills.
3. Cleaning system.
 - a. Vacuum system.
 - b. Brushes, brooms, etc.
 - c. Frequency of cleaning.
4. Electric service system.
 - a. Program clock.
 - b. Bells.
 - c. Inter telephone system.
5. Water supply system.
 - a. Source of water supply.
 - b. Fountains.
 - c. Containers.
6. Toilet system.
 - a. Number of toilets.
 - b. Distribution.
 - c. Fixtures.
 - d. Seclusion.
 - e. Sanitation.

IV. Rooms.

1. Administration.
 - a. Principal's office.
 - b. Board room.
 - c. Library.
 - d. Teachers' room.
 - e. Emergency room.
 - f. Lockers.
 - g. Toilet rooms.
 - h. Showers.
 - i. Janitors' rooms.
2. Educational.
 - a. Class rooms.
 - b. Study rooms, or assembly hall.
 - c. Commercial rooms.
 1. Bookkeeping and stenography.
 2. Typewriting.
 - d. Laboratories.
 1. Physics, and lecture room.
 2. Chemistry, lecture room and dark room.
 3. Biology.
 4. Agriculture.
 5. Domestic science.



- a. Kitchen.
- b. Dining room.
- c. Cafeteria.
- d. Sewing room and fitting room.
- 6. Manual Training.
 - a. Bench and machine room.
 - b. Finishing room.
 - c. Lumber room.
 - d. Mechanical drawing room.

3. Social.

- a. Auditorium.
- b. Gymnasium.

V. Equipment of building as a whole.

- 1. Number, kind, and value of library books.
- 2. Number, kind, and value of musical instruments.
- 3. Lantern and slides.
- 4. Maps.
- 5. Laboratory equipment.
 - a. Physics.
 - b. Chemistry.
 - c. Biology.
 - d. Agriculture.
 - e. Domestic science.
 - f. Manual Training.

B. Organization, Administration, and Supervision. (This subject is most satisfactorily discussed in 'Public School Administration' by E. P. Cubberley.)

I. General organization.

- 1. School board.
 - a. Number, term, method of selection.
 - b. Qualification required of members.
 - c. Qualification of present members and of members for a number of years back.
 - d. Meetings.
 - 1. Time and place.
 - 2. Regularity of attendance.
 - 3. Contents, preparation, and preservation of minutes.
 - 4. Clerk.
 - 5. Powers and duties.
 - a. Exercised by board.
 - b. Delegated by board.
- 2. Principal.
 - a. Qualifications required and term of office.
 - b. Qualifications of present principal.
 - c. Qualifications actually possessed by principals for a number of years back.
 - d. Powers and duties.
 - e. List of things actually done in a period of time from one to four weeks showing range of duties and relative amount of time devoted to each.
 - f. Assistance given principal.
 - 1. By clerk.

3. Coordination of authority vested in school board and principal.
- II. Business administration.
 1. Methods of bookkeeping.
 2. Filing system.
 3. Purchasing agent.
 4. Method of purchasing, distributing and keeping track of supplies.
 5. Method of daily check on pupils per program.
 6. Method of securing, tabulating or recording daily attendance.
 7. Permanent record system.
 8. Samples of important reports and records regarding attendance and progress of pupils.
- III. Educational administration.
 1. Teaching corps.
 - a. Number of teachers.
 1. Men.
 2. Women.
 - b. Qualifications required and salaries paid.
 - c. Qualifications actually possessed by present corps.
 - d. Permanency of.
 - e. System of improving teachers already in the service.
 2. Supervision of actual schoolroom teaching.
 - a. Statement of things actually done within a limited period of time in an attempt to improve the classroom work of some specific teacher.
 1. Things done by principal.
 2. Things done by special supervisor.
 3. Supervision of curriculum making.
 - a. In curriculum making, to what extent are the services enlisted of:
 1. School board.
 2. Principal.
 3. Teachers.
 4. What study was made of the community; of the children?

C. The Curriculum.¹

- I. Different subjects included in the curriculum.
- II. Very brief outline of the course in each subject.
- III. Required subjects and electives.
- IV. Amount of time allowed each subject per week in each particular year.
 1. For preparation.
 2. For recitation.
- V. Percent of failures in each subject.
- VI. Requirements for graduation.
- VII. Efficiency of instruction.

1. The Curriculum, by Franklin Bobbitt.

- D. Standard Requirements.
 - I. The State requirements.
 - II. The University requirements.
 - III. The North Central Association requirements.
 - IV. The Federal and State requirements for Federal aid for vocational education.
- E. Application of standard tests.¹
- F. The Pupil.
 - I. The high school census.
 - 1. Method and frequency of taking.
 - 2. Census statistics, and use of same.
 - II. Enrollment statistics for purpose of showing efficiency of system in getting pupils into school.
 - 1. Enrollment for a series of years past.
 - 2. Number graduating for a series of years past.
 - III. The problem of discipline.
 - 1. Is it taken care of without special attention, by organization and interest in work?
- G. School Organizations.
 - I. Literary organizations.
 - 1. Name.
 - 2. Purpose.
 - 3. Work actually done.
 - II. Athletic organizations.
 - 1. Aim and character of work.
 - III. Other organizations.
 - 1. In school.
 - 2. In connection with community.
- H. School Sanitation and Medical Inspection.
- I. Miscellaneous.
 - I. Age and Progress card for high school pupils.
 - II. Vocational inquiry.
 - III. Financial condition of district, amount of money raised, amount possible to raise, amount spent for educational purposes, for building purposes, amount spent for teachers, supplies, equipment, etc.

DISCUSSION OF OUTLINE AND STATEMENT OF STANDARDS

As soon as a community high school district has been established by vote, and the board of education elected, advice in methods of procedure is needed. To give this advice three officials should be elected, and the following order of election

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1. Measuring the results of teaching, by W. S. Monroe.

Bulletin #1, Bureau of Educational Research, by B. R. Luckingham.

Statistical Methods Applied to Education, H. O. Rugg.

has been proposed:

First, the election of a clerk. It has been suggested, that during the early development period of the school that this official be a lawyer, in order that he may advise the board in all its legal procedure.

Second, the selection of a principal that he may furnish educational guidance.

Third, the choosing of an architect to advise from the very beginning on advantages and disadvantages of location of site, and other questions concerning the physical structure of the plant.

One of the aims of this thesis is, so far as possible, to set up standards and standard methods of procedure, based upon the best practices in past experience.

Practice has shown that in the selection of a principal it is not the wisest plan for boards of education to rely wholly upon their own judgments in passing upon the educational qualifications and ethical standards of the applicants. These are matters that may well be submitted to those who are in possession of data that will enable them to make a proper decision. For this knowledge, boards of education should seek the assistance of the office of the State Superintendent of Public Instruction, the office of the State University High School Visitor, and the Office of the State University Appointments Committee. With this information secured, and all other information that may be gotten from communities where the applicants have served before, boards may then proceed upon their own judgments to select from the approved list, the man whose character and personal qualifications seem to them to fit him to their particular community and local conditions.

Having selected a principal, the board with him, may now proceed in the selection of an architect. Here again caution should be used. It is conceded by boards of education and by best architects, that it is not the best practice to permit a number of architects to submit plans and enter into competition of bids. Best architects will not submit bids. A plan that has met with approval is to select a number of school architects of considerable experience, and through communication with school men and boards of education where these architects have given service, determine upon one that is both competent and reliable.

When the board of education has selected its principal and architect, and with them has made a careful study of the community needs, they should then with these officials visit the best existing community high schools to see what is being done in high school practice; what districts have achieved in adapting their school system to the local situation; wherein the needs of these localities are similar to that of their own; what are the best features of the plants and what are the defects. With full information thus secured and with the local needs clearly in mind they may now proceed to plan their own school system, keeping clearly in mind the needs of the future as well as the needs of the present.

PHYSICAL STRUCTURE OF SCHOOL

Site. When the board of education is ready to consider the question of site, the architect should be relied upon for his expert advice in regard to location, surroundings, drainage, and accessibility.

Building. In determining the general size of a building for a community, J. W. Royer's practice is to always provide accom-

modation sufficient for total present or probable enrollment plus 50%.

STANDARDS

Stairways. There should always be at least two stairways from floor to floor, and these should always be provided with outside light. They should be built in two parallel runs with no stairwell between. The stairwell provides a draft in case of fire. The width of the run should be from five to six feet, in order to accommodate two persons abreast. If made wider, a rail should be placed in the center to prevent crowding and confusion. The stairways should be centrally located and there should be one within fifty feet of each of the educational rooms. These suggestions are based upon the best practices.

Corridors. Corridors should never be less than nine feet in width. Economic practice and efficiency limits them from nine to fourteen feet in width. The size of the corridors should vary according to the amount of travel, and should be enlarged at points where congestion is likely to occur.

Basement. In justice to pupils and teachers there should be no basement. A basement does not admit of adequate light and causes improper sanitation. There may be a sub-basement for the placing of pipes. The first floor of the building should be a ground floor. This provision permits the windows to be made the same size as those of other floors and gives ample illumination. Further, omitting the basement and building the first floor on the ground level provides a means for better drainage.

Attic. One of the aims in building construction is to avoid waste space in order to save expense. A large attic adds

expense. Using the flat roof reduces waste space to a minimum, after allowing sufficient room for pipes.

Heating, Lighting, and Ventilating Systems. The heating, lighting, and ventilation of school buildings are of such vital importance that they should be taken care of by special engineers in these lines. If the architect does not have such engineers in his organization, they should be called in from the outside.

Fire Protection. The first standard of procedure to insure against fire, is to build a fire-proof building with stairs, corridors, and exits arranged with a view to allow quick egress of pupils. Every school should be so constructed as to permit its contents to be emptied in a maximum of from three to five minutes. Separate outside fire exits should be provided in connection with auditoriums and gymnasiums.

Electric Wiring. The electric wiring should always be placed in conduits. In case the boiler room is in connection with the main building, or is semi-detached from it, fire doors should be used for the separation. In no case should boiler room and coal storage be built otherwise than completely fire-proof, i.e., with fire-proof walls and fire-proof ceiling. The doors to all exits should be provided with panic bolts by which they can be instantly opened from the inside by a slight pressure on any part of the bar. Well organized fire drills, without running and confusion, should prove a great benefit in case of fire.

Cleaning system. A vacuum cleaning system should always be installed whenever finances will permit. But should it be impossible to install the system at the time of building, all piping

for later installation should be placed at this time.

Electric Service System. In a system of well regulated schools where the movement of pupils and teachers from classes to classes are so inter-related, economy of time and systematic control demand the use of a master clock. The master clock is usually placed in the principal's office and other clocks in connection with it are placed in the corridors, study rooms, and various departments. Gongs should be placed in the corridors, and when signals are necessary in class rooms, buzzers should be used instead of bells as they are less exciting to nervous pupils. Convenience and economy of time make the use of an inter-phone system desirable.

Water Supply System. The water supply system is a problem to be solved according to local conditions. All sanitary rules should be strictly observed. Fountains and containers should never be placed in toilet rooms but always in the corridors.

Toilet System. The main toilets of the building should be placed on the ground floor. There should be separate toilets for each of the sexes and they should be well separated.

The standard seems to indicate, for economy's sake, that in schools with an enrollment not exceeding two hundred, the toilets may all be placed on the first floor, but with a greater enrollment there should be toilets on each floor. However, the following arguments have been given for placing toilets on each of the floors in all cases; first, the economy of time; second, the critical period of high school age of girls warrants that they should do as little climbing of stairs as possible.

There should always be separate toilets for the instructors, and a toilet in connection with the emergency room.

The total number of fixtures is based upon the following schedule:

1 closet for every 18 girls,

1 closet for every 25 boys,

1 urinal for every 18 boys; the urinals should be made of solid porcelain and be of the self-ventilating type.

There should be an ample number of wash bowls, but as yet no standard has been derived. In addition, when Manual Training is given, there should be an extra wash room or extra washing facilities. All wash rooms and toilets should be well ventilated. Each fixture should be separately ventilated, thus making double ventilation. Careful attention to ventilation and frequent washing and cleansing should be required of the janitor, to insure proper sanitation. In no case should deodorizers and disinfectants be substituted for cleanliness.

Rooms.

Administration.

Principal's Office. The principal's office should be located near the main entrance of the building in order that he may supervise the ingress and egress of pupils, and that it may be more convenient for patrons and other callers. In connection with his office should be a vault, a storage closet, and a toilet.

Board Room. The board room should be adjacent to the principal's office. In a small school the library may be made to serve for the board room.

Library. In the small school systems the library is usually placed in connection with the principal's office and may

serve as the board room. In larger systems the library is located near the study rooms.

Teachers' Rooms. There should be two teachers' rooms, one for males and one for females. A toilet should be in connection with each, and a kitchenette may be connected with the room for female teachers.

Emergency Room. The emergency room may be placed in connection with the ladies toilet, or it may be arranged with separate toilet.

Lockers. Cloak rooms should not be placed in high school buildings, except as a check room in connection with the auditorium for the use of the public. There should be adjacent to the toilet rooms on the first floor, a well lighted and well ventilated locker room for each sex. If finances require greater economy and compactness, the lockers may be placed in the corridors flush with the wall. The objection to locating them in the corridors is that it gives no privacy nor ventilation, and it promotes visiting and congestion.

Janitor's Room. The janitor's room should not be overlooked. When possible he should have a room on each of the floors for storing his supplies and equipment.

Boiler and Fuel Rooms. Always have boiler and fuel rooms semi-detached from the main building. This eliminates danger from fire and insures cleanliness from dust and smoke. It also gives accessibility.

Educational. The consideration of class rooms is of very great importance from several standpoints. Architect J. W. Royer, has adopted 21 feet as the standard width. This seems to be the

optimum width for giving the required volume and area with greatest economy. The length has not been standardized and should not be. It will vary according to the size of the class, and the size of classes will vary. The maximum limit of a standard class is 30 pupils. Standard practice allows a volume of 200 cubic feet to each pupil, and an area of 16 square feet, with possibly a twelve-foot ceiling.

To secure standard lighting effect the distance of the desk farthest from the outside wall should not exceed one and one half times the distance from the top of the window to the floor. The area of glass in any given classroom should equal one fifth of the floor area. The top of the window should be as nearly as possible to within six inches of the ceiling. The light should always come from one side, and over the left shoulder. The teacher's desk and blackboard should be so located as not to cause her to directly face the light.

Study Rooms, or Assembly hall. Practice has not definitely settled the question as to whether or not there should be an assembly room, or in its stead a number of study rooms. The tendency is toward a number of study rooms. They are better adapted to supervised study, and this arrangement gives the teacher smaller numbers for overseeing during study periods.

It is the practice of J. W. Royer to make study rooms for not more than 100 to 125 pupils. If there are more than 125 an additional study room is advised. In the larger schools the library is located near the study rooms.

Commercial Rooms. It is advised to place the bookkeeping and stenography room and the typewriting room side by side with

glass partition. This enables the commercial teacher to oversee both divisions of work at the same time.

The physical, chemical and biological laboratories should be made to accommodate 24 pupils. This is as many as one instructor can well supervise. To provide for this number the standard laboratory is 21 feet by 36 feet. This gives ample room and an abundance of light. If one laboratory each for physics and chemistry, cannot take care of the full number of pupils, taking these subjects in sections, then it is advisable to build other laboratories instead of one large laboratory. These laboratories may be of two types, one with integral lecture space, and the other with separate adjacent lecture room. If the system is not too large, one general lecture room between the physical and chemical laboratories will suffice. In addition, there should be provided a dark room, supply rooms, and apparatus cases. The chemical laboratory should be provided with fume hoods, one hood to each eight pupils.

Location and Exposure. It is advisable to locate the domestic science, manual training, and agricultural departments on the first floor. In these departments materials are used that should not have to be carried up flights of stairs. In small schools the physical, chemical, and biological laboratories are usually placed on upper floors. In larger systems laboratories are placed in buildings separate from main buildings for convenience of repairing pipes. All laboratories should have an abundance of light, and for this reason they are given a south exposure. Class rooms should be given the east and west exposures, while art and drafting rooms should have the north light.

The equipping of each of these particular departments should be supervised by the teacher at the head of the department, who should be a specialist in that work.

Auditorium. When finances will permit, there should be a separate auditorium and gymnasium. They should be combined only for the sake of economy. In building an auditorium Mr. Royer always allows $6\frac{1}{2}$ square feet of floor to each person. This includes aisle space. The auditorium should be so located that it can be used for outside purposes during school hours without disturbing school work. Provision should be made for ample dressing room facilities. Many mistakes have been made in building too small a stage. It should be at least 20 feet in depth and 28 to 40 feet in width. These requirements are very essential in view of the many social performances that are rightly a part of the school work, and for community service.

Gymnasium. When finances will permit it is desirable to build two gymnasiums, one for each sex. When the enrollment exceeds six hundred, there should certainly be separate gymnasiums for each of the sexes with provision for combining the two. The gymnasium should be large enough for the standard basket ball court, which is 35 feet by 70 feet for playing space, with a 3-foot foul line. The height should be at least sixteen feet, and more if possible. There should be provided ample bleacher space for accommodating the audience, and a permanent balcony or removable bleachers. If possible, the seating of the audience at the end of the gymnasium should be avoided.

ADDITIONAL STANDARDS

Light. The minimum amount of light permissible at the worst lighted desk is three 'foot-candles.' The amount of light can be tested by the Sharp-Miller Photometer.¹

Temperature. The maximum temperature should not exceed 68 degrees. This should be determined by a standard thermometer and not by a commercial thermometer.²

Humidity. The proper humidity is 50%, with a range of from 40% to 60%.³

Blackboards. The standard height of blackboards in high schools is 30 inches from the floor.⁴

In the foregoing standards it will be found that some have been much more thoroughly standardized than others. What is offered here is an attempt to gather together what seems to be the best achievements up to the present time.

1. The Public Schools of Springfield, Illinois. A Survey by Leonard P. Ayres, p. 26.

2. Ibid, p. 29.

3. Ibid, p. 30.

4. Ibid, p. 34.

PART II

SURVEY OF BEMENT TOWNSHIP HIGH SCHOOL

PURPOSE

In order to show the effectiveness of the preceding outline when applied to an existing township high school, a survey was made. For this demonstration the Bement Township High School was selected, since it was conveniently located, and not because it was a pure type.

BY WHOM MADE

The survey was made by the writer for the most part. Some assistance was given by the principal of the school who at all times showed himself in perfect harmony with the work and ready to offer every facility for securing the desired information.

SCOPE OF THE WORK

The lack of time called for a brief survey. Consequently, only such parts of the outline were used as could be completed with the time and effort at the disposal of the writer.

PHYSICAL FEATURES OF THE PLANT

Bement has an established township high school in operation, but as yet, has no separate building. The high school occupies a part of the second floor of the former Bement District school building together with three outside classrooms of temporary construction. The remainder of the building is used by the city grades.

The school is located in the residence portion of the town one block from the main business street. The building and the grounds cover one block. In this location it seems to lack space for free expansion and development, and does not seem to

have that sense of institutional unity that is so characteristic of the typical township high school which is usually located at the outskirts of a village. The building was erected twenty years ago to accommodate both district grades and high school. With inadequate light for the assembly room, which has a glass area of only 7.3% of the floor space, while the standard is 20%; with a small laboratory approximately 16 feet by 22 feet, used both for recitation and experimentation in all of the science work, and having no adequate storage closets for apparatus and supplies; with no gymnasium nor rooms for vocational departments, the building is entirely inadequate to meet the needs of a modern township high school.

SCHOOL BOARD

The school board is composed of seven members, an electrician, two bankers, and four farmers. They place great confidence in their principal as is shown by giving him almost sole power in selecting and hiring his faculty, and in determining school policies. There is a question, as with many boards, as to whether or not they are as familiar as they should be with the educational results of the school.

TEACHERS

Bement employs six teachers for full time, all of whom are high school graduates, five of whom are university graduates, representing three universities, and all of whom have had adequate experience.

The salaries paid the teachers are as follows: \$2400., \$1575., \$1350., \$1050., \$1000., \$990. The average is \$1394.16.

The preparation of the teachers and the salaries seem to be adequate for the requirements of the average modern school.

CURRICULUM

FIRST YEAR

Required	Electives
English I	Latin I
Algebra I	
Physiology	
Physiography	

SECOND YEAR

Required	Electives
English II	Latin II
Plane Geometry	Roman History
	Zoology
	Botany

THIRD YEAR

Required	Electives
English III	Algebra II
	Economics
	Civics
	M.&M. History
	Latin III
	French I
	Chemistry
	Solid Geometry

FOURTH YEAR

Required	Electives
English IV	Latin IV
Physica	German II

The survey revealed the following subjects included in the curriculum with the proportionate amount of time devoted to each:

English.	25%	Music	2%
Foreign Language ..	15%	Manual Training	0%
Social Science . . .	17%	Agriculture	0%
Mathematics.	20%	Domestic Science	0%
Physical and Biol- ogical Science. . .	21%	Stenography and Book- keeping	0%

The curriculum states that four years of English are required; two years of mathematics; one half year each of physiology and physical geography; and one year of physics. Since sixteen units are required for graduation, and since only twenty units are offered, this is practically equivalent to prescribing the entire course a pupil may take. There is very little choice of studies offered as may be seen by an examination of the curriculum.

CLASSROOM INSTRUCTION

An effort was made in the brief time available to secure as accurate and sympathetic an appreciation of the quality of classroom work as possible. To this end the classroom of each teacher was visited and observed through one recitation period. It is unjust to attempt to draw a comprehensive conclusion from one visitation of such short duration. But some things may be mentioned. Each teacher seemed conscientious and was working hard for results.

Some of the recitations were marked by that give-and-take process on the part of teacher and pupils. In other classes there was too much of the old-time flavor of transfer from the book to the memory of the pupil. This latter was shown by pupil after pupil being asked the questions from the book in the order in which they occurred at the close of the chapter. The responses seemed to be from obligation more than from interest.

DISCIPLINE

The discipline in the Bement Township high school is good. In and about the school is that atmosphere of right appreciation of good conduct. In none of the classes was it necessary for an instructor to give especial attention at any time to keeping order. Self government is used to a large extent, and the high school pupils justify the confidence that is placed in them, for during the period of the survey no disorderly conduct was observed either in classrooms or elsewhere about the school.

USE OF THE BUILDING

Aside from a few basketball games played in the attic of the building during the basketball season, the building is used only from 9 o'clock A.M., until 4 P.M., five days per week for 36

weeks during the year. It is not used as a social center.

DAILY PROGRAM

Teachers.	9:00 to 9:15	9:15 to 9:55	9:55 to 10:35	10:35 to 11:15	11:15 to 11:55	11:55 to 12:00	12:00 to 1:20	1:20 to 2:00	2:00 to 2:40	2:40 to 3:20	3:20 to 4:00
1	:	:	:Alg.I:	:	:	:	:	:	:	:	:
2	:	:Eng.I:	Eng.II	Assem	EngIV:	:	:EngIII	Thesis	work	-----	:
3	:	:GerII:	:	:Latin:	:Latin:	:	:Assem:	:Latin:	:French:	:	:
	:	:	:	:II:	:I:	:	:	:IV:	:I:	:	:
4	:	:Assem:	:	:Civics:	:	:	:Econom:	:Roman:	:Assem:	:M.&M.	:
	:	:	:	:	:	:	:	:Hist.:	:	:Hist.	:
5	:	:Plane:	Assem:	:	:Alg.	:	:Assem:	:Physiol:	:	:	:
	:	:Geom.:	:	:	:II:	:	:	:	:	:	:
6	:	:Physics:	:	:Chem.:	:Lab.:	:	:	:Chem.:	:	:Botany	:
	:	:T.T.&:	:	:T & F:	:....:	:	:	:rec	:	:	:
	:	:F.:	:	:.....:	:	:	:	:M.W.&F:	:	:	:
	:	:Lab.....:	:	:	:	:	:	:	:	:	:
	:	:M&W.....:	:	:	:	:	:	:	:	:	:

The above program indicates that the work is well distributed and that no teacher is required to have more than the standard number of daily recitations.

STATISTICS

The pupils of the school were asked how many brothers or sisters they had between the ages of 14 and 21 who are at work, the kind of work they were doing, and how far they had gone in school. The following results were obtained:

1 quit in 5th grade			
1	"	"	7th "
13	"	"	8th "
2	"	"	9th "
16	"	"	7th, 8th, and 9th grades.

1	"	"	10th grade
2	"	"	11th "
2	"	"	12th "
5	"	"	10th, 11th, and 12th grades.

Sixteen out of 22, or 72 8/11% of them quit school during the 7th, 8th and 9th grades. Fifteen of the 22 were boys, and over 50% of them stated as their reason for quitting, that they did not like school. Of the above 22, two are farmers, three are railroad men, two are bookkeepers, two are clerks, two are in the army, two are housekeepers, one is a teamster, one is a dressmaker, and one is a telephone operator.

Out of the 86 pupils in regular attendance, 44 had repeated a grade or grades during their school life. Twenty-three of the 44, or 52% of these repetitions, were in the 7th, 8th, and 9th grades.

The above conditions seem to indicate very strongly the need of Junior High School conditions, i.e., the reorganization of the school system; vocational guidance; and provision for individual differences.

Year	No.en-rolled	No.grad-uated	No.going to Uni.or Col.	No.going to Normal	No.going to Business Col.	No.of grad-uates living in Be-ment
1915...	77	9	3	3	0	6
1916...	87	18	1	3	2	12
1917...	116	13	5	0	0	12
1918...	101	22	4	3	2	19
1919...	102	13				

Out of the 62 graduates during the four years, 1915 to 1918 inclusive, not including those attending college or university, 47 of them, or 72% of them, continue to make their homes in and around Bement. Only 6 have gone to places of considerable size. This would indicate that a close study of community conditions should be made and used as a guide for building the curriculum.

Assuming 14--19 as high school age,

Number of pupils in Dist. No.108¹ of high school age 1918...332.
 Number of pupils enrolled in high school..... 1918...101.
 Percent of pupils of high school age in attendance.. 1918... 30.

This indicates a lack of organized endeavor on the part of the school authorities to get pupils into school, a lack of adaptation of the curriculum to community needs, a neglect of the proper provisions for accommodating the pupils within the district, or a failure on the part of the public to appreciate the importance and value of secondary education. Each of these suggests the proper remedy.

Acceleration and Retardation

Assuming normal progress to be

those 14 years old in 9th grade,
 15 " " "10th " ,
 16 " " "11th " ,
 17 " " "12th " ,

out of the 86 pupils in present attendance,
 1 is under-age

 25 are at-age, and

 60 are over-age. (This condition warrants investigation).

Of the 86 pupils in high school

83, or 96.5%, expressed a wish and intention to finish high school,

2 did not; one was absent.

60, or 69.6%, expressed a wish and intention to go to college, or to business college,

10, or 11.6%, expressed no wish or intention,

16, or 18.6%, stated definitely that they did not intend to go to either business college, or to college.

1. Bement High School District.

In comparison with the above

The records show that in the last four years, 1915 to 1918 inclusive, out of 381 pupils that enrolled in high school,

62 or 16.9% have graduated from high school,

26 or 6.8% have gone to college, or to business college,

355 or 90% have gone no further than the high school with their education.

From vocational inquiry, this is what they wish to be when they are grown up--

These are the vocations represented by high school graduates for the last four years--

25...no choice.....
18...stenographer & bookkeeper
15...teacher.....
7...farmer.....
4...nurse.....
3...mechanic.....
1...engineer.....
4...music teacher.....
2...lawyer.....
2...missionary.....
1...chemist.....
1...barber.....
1...own and operate picture..
show.....

86

12...no vocation.....
4...stenographer & bookkeeper
6...teaching.....
9...farming.....
1...nurse.....
1...mechanic.....
1...electrician.....
4...clerk.....
4...laborers.....
4...in army.....
1...accountant.....
1...implement dealer.....
1...railroading.....
1...operating creamery.....
13...continuing school.....

62

OCCUPATIONS REPRESENTED IN DISTRICT NO. 108

- 208--Farmers.
- 119--Laborers, including farm, general, and section labor.
- 39--Retired farmers.
- 14--Teachers (all classes).
- 13--R.R. trainmen.
- 12--Dreyemen and teamsters.
- 11--Carpenters.
- 11--Machinists (all laborers working with very intricate machinery).
- 7--Grocery clerks.
- 6--R.R. clerks.
- 6--Domestics.
- 6--Barbers.
- 6--Painters.
- 7--Ministers.
- 4--Grocers.
- 4--Hardware dealers (2 firms).
- 4--Restaurant owners.
- 4--Telephone operators.

3--Insurance agents.
 3--Concrete workers.
 3--Lawyers.
 3--Seamstresses.
 3--R.F.D. carriers.
 3--Garagemen.
 3--Musicians.
 2--Implement dealers.
 2--Druggists.
 2--Surveyors.
 2--Tanners.
 2--Plumbers.
 2--Laundry agents.
 2--Dentists.
 2--Doctors.
 2--Haberdashers.
 2--Dry Goods clerks.
 2--Blacksmiths.
 2--Lumber dealers.
 2--Dealers in general merchandise.
 2--Bankers.
 2--Telegraphic linemen.
 2--Tailors.
 1--Stenographer.
 1--Magazine agent.
 1--Policeman.
 1--Plasterer.
 1--Bridge builder.
 1--R.R. bridge builder.
 1--Postmaster.
 1--Baker.
 1--Standard oil agent.
 1--Jeweler.
 1--Veterinarian.
 1--Priest.
 1--Express agent.
 1--Poultryman.
 1--Butcher.
 1--Sewing Machine agent.
 1--Traction agent.
 1--Dry goods dealer.
 1--Publisher.

Out of 571 vocations represented in the district

545, or 95.4% are non-professional. This argues very strongly for vocational and industrial subjects in the curriculum.

247, or 43%, are farmers. This is a most convincing argument for agricultural instruction.

The Bement Township high school district is approximately nine miles by nine miles, covering an area of 83 sections or 53,120 acres of very valuable land in Piatt County. In view of these facts, it would seem that there is no legitimate reason why Bement Township high school should not be provided with an adequate modern school building, well equipped, and with vocational courses suited to the needs of the community.

SPECIAL BLANKS USED
I
Bement Township High School
Teacher's Record

Name-----

Permanent address -----

Subjects taught-----

In charge of what activities -

a. Connected with the school-----

b. Outside of school -----

Number of daily recitations -----

Number of periods in charge of assembly room -----

Preparation:

High School, place ----- No. Months-----Graduate date-----

Normal School, " ----- " " ----- " " -----

College or Univ." ----- " " ----- " " -----

Other special work -----

Number of years taught, including current year, in

a. Rural schools ----- b. Graded schools -----

c. High Schools ----- d. Other schools -----

Years taught in Bement High Schools -----

Grade of certificate held -----

Salary this year -----

Bement, Ill., ----- 1919

II

Vocational Inquiry, Bement, Ill., March _____ 1919

Name _____ Age _____ Grade _____

Were you born in Bement? _____

Were you born in Illinois? _____

Were you born in the U. S.? _____

Do you intend to finish high school? _____

Do you intend to go to college? _____

Do you intend to go to a business school? _____

What do you want to do for a living when you are grown up? _____

Was your father born in Bement? _____

In Illinois? _____ . In the U.S.? _____

What is your father's occupation? _____

How many brothers have you between the ages of 14 and 21 who
are at work? _____1. Age _____ Kind of work _____ How far did he go in
school? _____2. Age _____ Kind of work _____ How far did he go in school?
_____3. Age _____ Kind of work _____ How far did he go in school?
_____How many sisters have you between the ages of 14 and 21 who are
at work? _____

1. Age _____ Kind of work _____ How far did she go in school? _____

2. Age _____ Kind of work _____ How far did she go in school? _____

3. Age _____ Kind of work _____ How far did she go in school? _____

STANDARD TESTS

In order to make a general application of tests to all pupils in the high school, rather than to test various classes separately, it was decided that the following tests best suited the purpose:

Arithmetic Test, Opposite Test, and Vocabulary Test, of the Bureau of Educational Research of the University of Illinois, Monroe's Silent Reading Test, Trabue's Language Scale L, and Trabue's Language Scale M.

While the first three tests have not been completely standardized, they measure mental ability and serve as a check upon the others.

The following tables show the scores by classes:

Freshmen

Number of Pupil	Arith-Oppo- metic site	Vocab- ulary	Silent Rate	Reading Comprehen- sion	Trabue's Lang.Scale L	Trabue's Lang.Scale M
1	27	20	38	125	22.7	8
2	10	19	48	109	28.7	4
3	27	16	62	125	33.3	6
4	21	16	45	77	29.5	2
5	16	18	46	86	32.3	-
6	23	13	56	109	34.3	7
7	10	17	45	109	34.2	3
8	27	17	52	125	40.0	9
9	19	10	60	125	16.9	5
10	14	14	43	125	24.3	1
11	20	12	47	86	27.8	10
12	16	10	46	125	41.6	4
13	13	17	51	109	44.8	5
14	24	10	49	125	34.3	9
15	-	10	36	125	34.4	0
16	13	20	45	86	28.5	8
17	15	7	40	125	33.4	5
18	16	19	58	137	33.4	3
19	18	14	53			7
20	24	15	66	137	47.0	3
21	24		61	125	45.8	7
22	17	4	39	86	17.1	0
23	29	29	63	137	48.4	9
24	22	22	61	109	24.9	6
25	19	16	74	125	18.8	6
26	17	12	53	86	27.0	6
27	21	26	63	68	27.8	4
28	23	15	49	125	45.8	5
29	23	11	48	55	28.3	2
30				86	27.7	4
31				109	28.5	6
32				109	17.9	5
Class Median						
	19	16	49	109	29.5	5
						4

Sophomores

Number of Pupil	Arith- metic	Oppo- site	Vocab- ulary	Silent Rate	Reading Compre- hension	Trabue's Lang.Scale L	Trabue's Lang.Scale M
1	14	17	50	109	18.3	4	6
2	14	24	63	109	39.9	7	6
3	21	22	62	137	34.3	5	6
4	14	27	65	125	40.9	9	8
5	24	25	68	109	36.5	7	8
6	19	7	59	86	27.8	5	6
7	23	18	66	109	40.0		
8.	21	27	60	151	53.6	6	10
9	23	24	61	125	35.1	3	4
10	21	12	46			6	8
11	12	13	55	109	44.8	6	5
12			43	77	22.3	5	2
13			56			7	4
Class	21	23	60	109	36.5	5.5	6
Median							

Juniors

1	27	24	76	151	54.3	7	6
2	23	19	48	125	34.2	7	8
3	22	24	61	86	38.2	7	6
4	15	21	65	151	21.9	9	8
5	18	15	61	86	24.1	7	6
6	28	19	66	109	33.3	8	3
7	19	15		86	22.0		
8	17	23	60	151	25.8	3	1
9	19	21	52	125	17.0	3	8
10	18	16	67	109	44.8	9	3
11	32	24	76	125	40.0	8	10
12	28	18	71	109	39.9	5	9
13	35	20	51	86	21.8	7	6
14	31	27	63	137	59.2		
15	19	23	54	109	44.8	5	6
16	25		61	125	40.7	8	10
17	23		57	137	41.8	9	12
18	24	27	71	125	62.6	4	10
19	25	10	53	151	19.3	6	6
20	14	15	56	125	35.7		6
21	20	22	66	109	34.2	8	4
22	33	26	70	137	39.9	11	
23	26	25	75	125	45.9	7	4
24	21	17	54	109	38.9	5	9
25	16	15	47	68	11.2	4	2
26	16	17	34	86	27.4	0	5
27	20	18	48	109	32.5	7	6
28	22	7	55	86	21.7	3	4
29				68	27.7	6	6
Class							
Median	22	19	61	109	34.2	7	6

Seniors

Number of Pupil	Arith- metic	Oppo- site	Vocab- ulary	Silent Rate	Reading Compre- hension	Trabue's Lang. Scale L	Trabue's Lang. Scale M
1	33	37	94	151	53.3	8	10
2			58			6	7
3	17	8	56	125	30.5	8	2
4	16	14	50	109	29.4	8	4
5	21	21	72	109	44.8	9	4
6	17	22	70	109	39.9	7	10
7	24	21	62	109	34.1	4	5
8	23	15	51	109	22.2	3	4
9	17	15	50	125	36.1	4	6
10			54	109	39.2	11	3
11	24	14	59	109	38.2	4	6
12	24	21	68	86	27.7	7	8
13	24	27	85	137	53.3	12	12
14				86	22.9		
Class							
Median	23	21	59	125	36.1	7	6

Number of quartile deviations, giving a comparable basis.

Freshmen

No. of Pupil	Arith.	Opposite	Vocab.	Rate	Compre.	Trabue	Total	Av.
1	+2.0	+1.0	-1.6	+1.3	-0.9	+2.6	+4.4	+0.73
2	-2.0	+0.8	-0.2	-0.1	-0.1	+0.2	-1.4	-0.23
3	+2.0	+2.5	+2.0	+1.3	+0.5	+1.4	+9.6	+1.60
4	+0.5	0.0	-0.5	+2.7	0.0	-2.6	-5.3	-0.88
5	-0.8	+0.5	-0.5	-2.0	+0.4	-1.4	-3.8	-0.63
6	+1.0	-0.8	+1.0	-0.1	+0.7	+2.0	+3.8	+0.63
7	-2.0	+0.3	-0.7	-0.1	+0.7	+2.0	+0.2	+0.03
8	+2.0	+0.3	+0.4	+1.3	+1.5	+0.6	+6.1	+1.01
9	0.0	-1.5	+1.5	+1.3	-1.8	-1.0	-1.5	-0.25
10	-1.0	-0.5	-0.9	+1.3	-0.7	-2.6	-4.4	-0.73
11	+0.2	-1.0	-0.4	-2.0	-0.2	+2.6	-0.8	-0.13
12	-0.8	-1.5	-0.5	+1.3	+1.7	-0.6	-0.4	-0.06
13	-1.5	+0.3	+0.2	-0.1	+2.2	-0.2	-0.9	-0.10
14	+1.2	-1.5	-0.1	+1.3	+0.7	+0.6	+2.2	+0.36
15		-1.5	-1.9	+1.3	+0.7	-2.2	-3.6	-0.72
16	+1.6	+1.0	-0.6	-2.0	-0.1	+1.0	+0.9	+0.15
17	-1.1	-2.5	-1.4	+1.3	+0.5	+0.2	-3.0	-0.50
18	-0.9	+0.8	+1.2	+2.3	+0.5	-1.0	+2.9	+0.48
19	-0.4	-0.5				+2.2	+1.8	+0.45
20	+1.1	-0.3	+2.4	+2.3	+2.5	-0.2	+7.8	+1.30
21	+1.1		+1.6	+1.3	+2.3	-0.2	+6.1	+1.22
22	-0.6	-3.0	-1.5	-2.0	-1.8	-3.0	-12.9	-2.15
23	+2.6	+3.3	+1.9	+2.3	+2.7	+2.9	+15.7	+2.61
24	+0.8	+1.5	+1.6	-0.1	-0.7	+2.6	+5.7	+0.95
25	-0.1	0.0	+3.5	+1.3	-1.5	-0.2	+3.0	+0.50
26	-0.6	-1.0	+0.5	-2.0	-0.3	+2.2	-1.2	-0.20
27	+0.4	+2.5	+1.9	-3.5	-0.3	-0.6	-0.4	+0.06
28	+0.9	-0.3	-0.1	+1.3	+2.3	-1.4	+2.7	+0.45
29	+0.9	-1.3	-0.2	-4.6	-0.2	-1.4	-6.8	-1.13
30				-2.0	-0.2	-0.6	-2.3	-0.93
31				-0.1	-0.1	+0.2	0.0	0.00
32				-0.1	-1.6	-0.2	-1.9	-0.60

Sophomores

No. of Pupil	Arith.	Opposite	Vocab.	Rate	Compre.	Trabue	Total	Av.
1	-1.8	-1.3	-1.5	+0.0	-2.7	-0.5	-7.8	-1.30
2	-1.8	+0.3	+0.4	0.0	+0.3	+0.7	-0.1	-0.01
3	+0.0	-0.3	+0.2	+2.4	-0.5	-0.1	+1.7	+0.28
4	-1.8	+1.0	+0.6	+1.4	+0.5	+2.3	+4.0	+0.66
5	+0.8	+0.5	+1.0	0.0	-0.1	+1.5	+3.7	+0.61
6	-0.5	-4.0	-0.2	-1.9	-1.4	-0.1	-8.1	-1.35
7	+0.5	-1.2	+0.8	0.0	+0.4		+0.5	+0.10
8	+0.0	+1.0	-0.1	+3.5	+2.3	+1.9	+8.6	+1.43
9	+0.5	+0.3	+0.1	+1.4	-0.3	-1.7	+0.3	+0.05
10	0.0	-2.7	-2.1			+1.1	-3.7	-0.92
11	-2.5	-2.5	-0.8	0.0	+1.4	-0.1	-4.5	-0.75
12			-2.5	-2.6	-2.2	-1.7	-9.0	-2.25
13			-0.6			-0.1	-0.7	-0.35

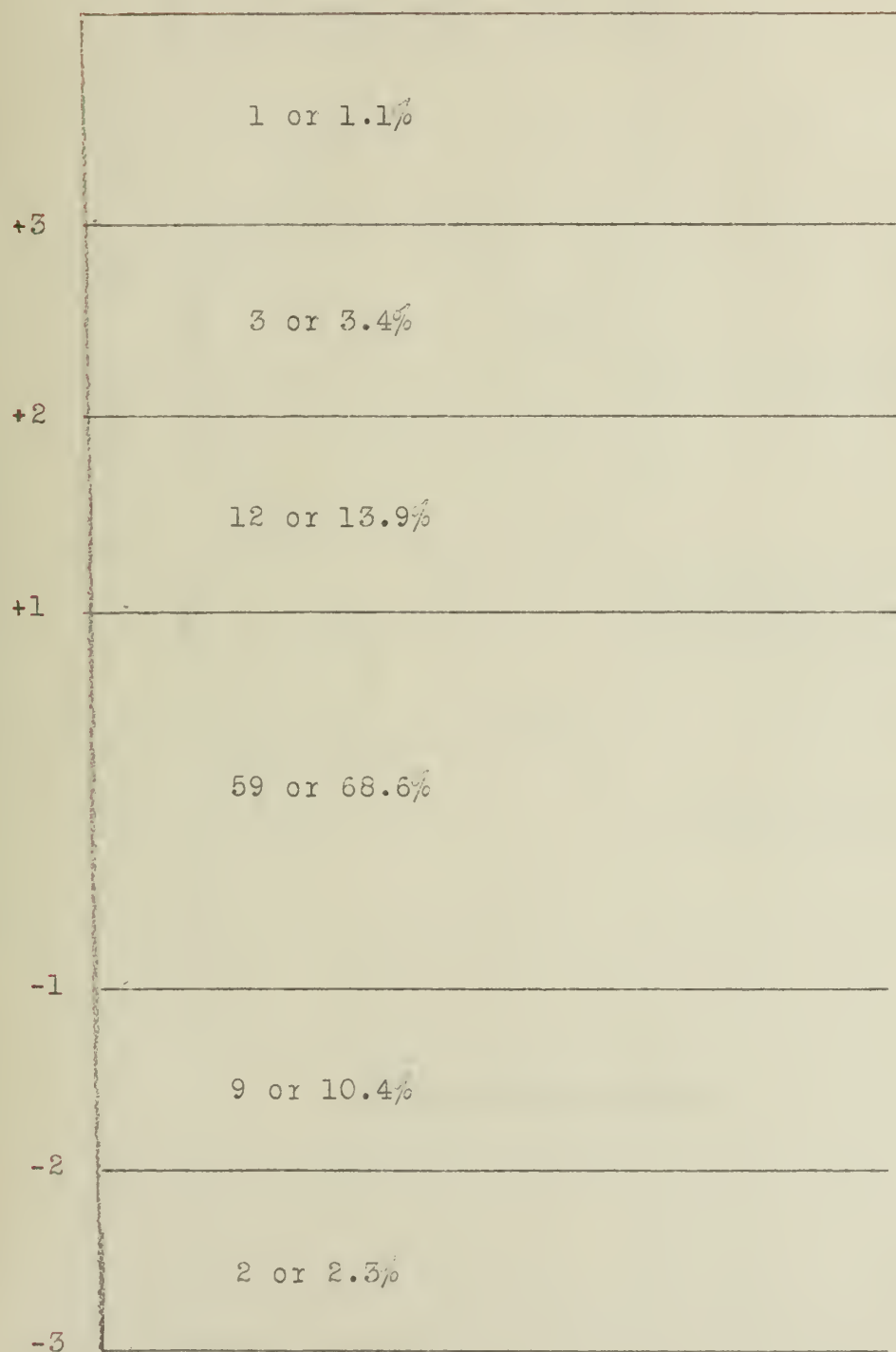
Juniors

1	+1.3	+1.1	+2.1	+3.4	+2.8	+0.2	+11.9	+1.98
2	+0.3	-0.1	-1.9	+1.3	-0.0	+1.0	+ .4	+0.66
3	0.0	+1.1	-0.1	-2.0	+0.5	+0.2	- .3	-0.05
4	-1.5	+0.4	+0.5	+3.4	-1.8	+1.8	+2.8	+0.46
5	-1.0	-1.1	-0.1	-2.0	-1.5	+0.2	-5.5	-0.91
6	+1.5	-0.1	+0.6	-0.1	-0.2	-0.6	+1.1	+0.18
7	-0.8	-1.1		-2.0	-1.8		-5.7	-1.47
8	-1.3	+0.9	-0.2	+3.4	-1.2	+0.2	+1.8	+0.30
9	-0.8	+0.4	-1.6	+1.3	-2.5	-0.6	-3.8	-0.63
10	-1.0	-0.9	+0.8	-0.1	+1.7	-0.2	+ .3	+0.05
11	+2.5	+1.1	+2.1	+1.3	+0.8	+2.2	+10.0	+1.66
12	+1.5	-0.4	+1.4	-0.1	+0.8	+0.6	+3.8	+0.63
13	+3.3	+0.1	-1.5	-2.0	-1.8	+0.2	-1.9	-0.31
14	+2.3	+1.9	+0.2	+2.3	+3.5		+10.2	+2.04
15	-0.8	+0.9	-1.1	-0.1	+1.5	-0.6	-0.2	-0.31
16	+0.8		-0.1	+1.3	+0.9	+2.2	+5.1	+1.02
17	+0.3		-0.6	+2.3	+1.1	+3.4	+6.5	+1.30
18	+0.5	+1.9	+1.4	+1.3	+4.0	+0.6	+9.7	+1.61
19	-2.0	-1.1	-0.8	+1.3	+0.2	-2.6	-5.0	-0.81
20	-0.5	+0.6	+0.6	-0.1	-0.0	-0.2	+ .4	+0.06
21	+2.8	+1.6	+1.2	+2.3	+0.8	-0.6	+7.9	+1.31
22	+1.0	+1.4	+1.9	+1.3	+1.7	-0.6	+6.7	+1.11
23	-0.3	-0.6	-1.1	-0.1	+0.7	+0.6	- .8	-0.13
24	-1.3	-1.1	-2.1	-3.5	+3.3	-2.6	-7.3	-1.21
25	-1.3	-0.6	-3.9	-2.0	-1.0	-3.0	-11.8	-1.96
26	-0.5	-0.4	-1.9	-0.1	-0.3	+0.2	-3.0	-0.50
27	0.0	-3.1	-0.9	-2.0	-1.8	-2.2	-9.0	-1.50
28	+0.8	-2.4	-1.2	+3.4	-2.2	-0.2	-1.8	-0.30

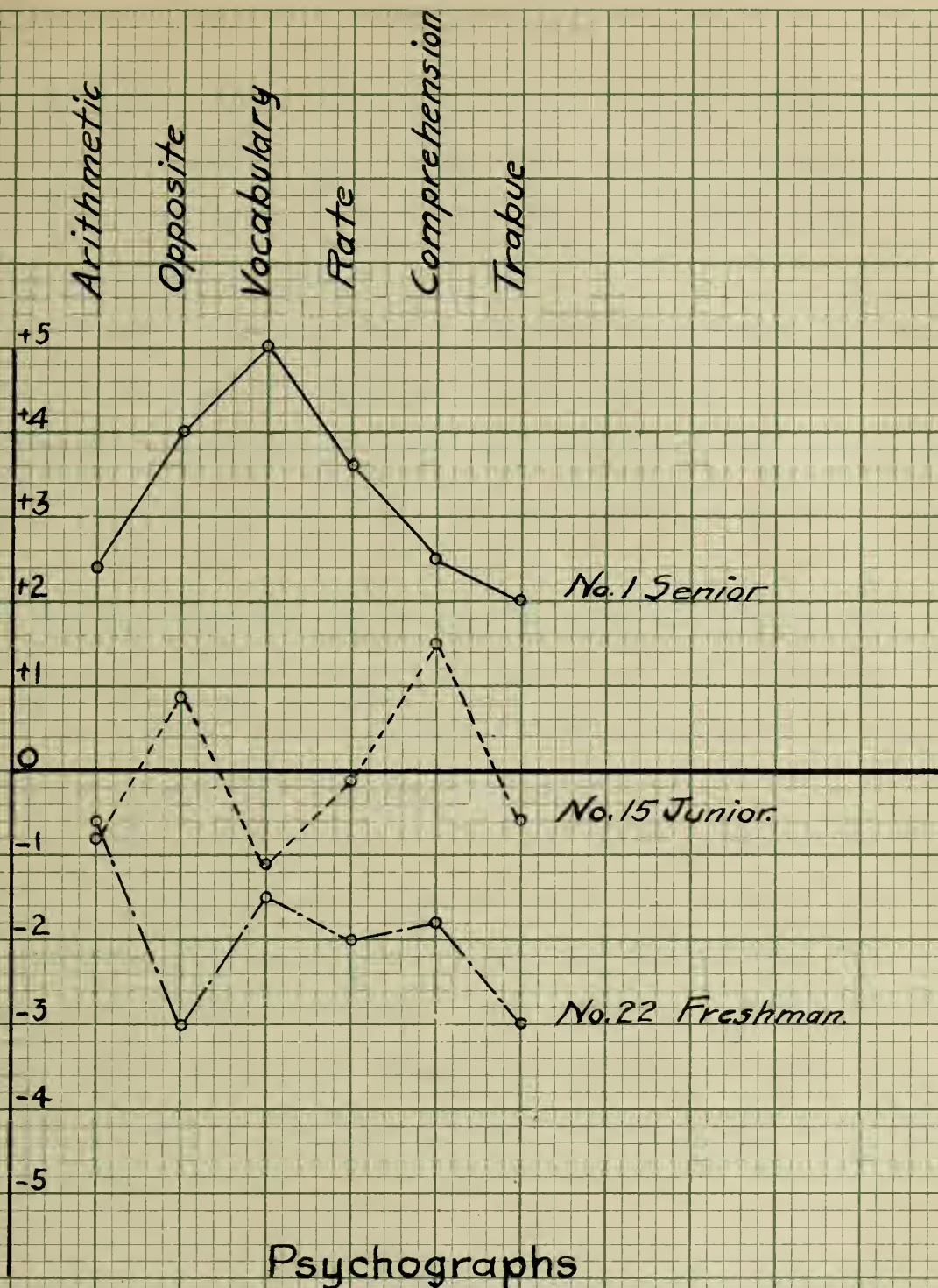
Seniors

No. of Pupil	Arith.	Opposite	Vocab.	Rate	Compre.	Trabue	Total	Av.
1	+2.4	+4.0	+5.0	+3.6	+2.5	+2.0	+19.5	+3.5
2			-0.1			0.0	-0.1	-0.05
3	-1.4	-3.3	-0.4	+1.4	-0.8	-1.2	-5.7	-0.95
4	-1.9	-1.8	-1.3	+0.1	-0.9	-0.4	-6.2	-1.03
5		0.0	+1.9	+0.1	+1.3	0.0	+3.3	+0.66
6	-1.6	+0.3	+1.6	+0.1	+0.6	+1.6	+2.6	+0.43
7	+0.1	0.0	+0.4	+0.1	-0.2	-1.6	-1.2	-0.20
8	-0.1	-1.5	-1.1	+0.1	-1.9	-2.2	-6.6	-1.10
9	-1.4	-1.5	-1.3	+1.4	+0.1	-1.2	-3.9	-0.65
10			-0.7	+0.1	+0.5	+0.4	+0.3	+0.07
11	+0.1	-1.8	0.0	+0.1	+0.3	-1.2	-2.5	-0.41
12	+0.1	0.0	+1.3	-1.9	-1.6	+0.8	-2.3	-0.38
13	+0.1	+1.3	+2.3	+2.4	+2.7	+5.2	+14.1	+2.35

Summary of Quartile Deviations.



The above shows quite normal distribution.



While the above tests are not absolutely reliable, they serve to indicate extreme tendencies and variations, and may be used as a basis for further diagnosis, and for readjustment of curriculum to individual cases.

In order to reduce them to a comparable basis, the quartile measure was found and applied to each individual score. This gives the amount of deviation above or below the class median for each pupil. The average of these for each pupil is given at the right.

The psychographs following the table illustrate the results of three individual cases: the first, an extreme positive variation; the second, one of medium variation selected at random; and the third, an extreme negative variation.

The first case points to a pupil of rare mental ability, and upon this showing he might well be urged to pursue a course of higher education. The second case shows the variability that is often found with average children. The third case indicates one of mediocre mentality to whom it would seem advisable to give work of a vocational character. In like manner a study of any individual case may be made.

CONCLUSION

In view of the following facts: that Bement is a farming community; that 92% of her high school graduates continue to live in and about Bement and in communities of similar conditions; that out of the occupations represented in the district, farming constitutes 43%; that 95% of her population are non-professional; that less than one third of the pupils of high school age in the district

are in school; that there are only 29 boys in high school, whereas there are 332 pupils of high school age in the district; and that in view of the fact that no agriculture, no domestic science, no manual training, and no commercial work is offered in the curriculum, it is very evident that Bement Township high school is failing to meet the needs of the community.

There is a responsibility upon the board of education, the principal of the school, and the people of the community to see that these conditions no longer maintain, and that all the pupils of Bement Township high school district have opportunities that will prepare them for efficient living and for their life vocations.

RECOMMENDATIONS

1. That a building site be chosen, of adequate size at the outskirts of the village.
2. That an adequate building or group of buildings of modern type according to latest standards be erected.
3. That a study be made of the community and that a curriculum be built to meet the community needs, especially those vocational and industrial.
4. That all courses be revitalized, and that the school be made a social center.
5. That the school comply with the standard requirements of the State, the State University, the North Central Association, and the Federal and State Board for Vocational Education.

PART III

SUGGESTIONS FROM EXPERTS

In order that the fullest use might be made of the best practices that have been developed out of experience in the Township High School movement in Illinois, the State University High School Visitor was asked to name a number of township high schools which in his judgment were competent sources of such information.

To secure this information a questionnaire was sent out to the principals of these schools. The desired information was of such a nature that it was deemed unnecessary to send out a large number of letters. Out of sixteen sent out, eleven resulted in replies.

The following is the questionnaire:

1. What are the outstanding commendable features in your school building which you would incorporate were you erecting a new building?
2. What are the outstanding objectionable features you would avoid?
3. What advice in the method of procedure would you offer a board of education where the township high school district has just been voted in?

Tables I, II, and III, show the replies received and the number of times each reply was made. Table I refers to question No. 1, Table II refers to question No. 2, and Table III refers to question No. 3.

TABLE I
Frequency of Replies to Question No. 1

Replies	Frequency
Good gymnasium	5
A group of buildings	4
Fire-proof construction.	4
Recreation building and social center.	3
Abundant light	3
School own campus and athletic field	3
Study desks adjustable and all facing same way	2
Swimming pool.	2
Good equipment	2
Program clock and inter-phone system	2
Vacuum cleaning system	1
Lockers connected with ventilating system.	1
Good sanitation.	1
Forced ventilation	1
Sound-proof floors	1
Large classrooms	1
Wide halls	1
Small recitation room, with tablet-arm, steel, pedestal chairs, 24 in room	1
Auditorium separate from study halls	1
Shops.	1
Auditorium	1
Group buildings of one story construction.	1
Auditorium with pitched floor.	1
Dressing rooms at side of stage sufficiently large	1

TABLE II

Frequency of Replies to Question No. 2

Replies	Frequency
Uncovered wooden floors	2
Too small gymnasium locker-rooms.	2
Too narrow halls.	2
Defective heating system.	2
A tower	1
A very large assembly room for which the rest of the building was sacrificed.	1
Too small recitation rooms.	1
Lack of forge room.	1
Basement.	1
Small gymnasium	1
Too small assembly room stage	1
Lack of manual training room.	1
Lack of dressing rooms for gymnasium.	1
Too small grounds	1
Narrow corridors and stairways.	1
Building not fireproof.	1
Boiler rooms immediately under main building.	1
Lack of built-in lockers.	1
Four-story main building.	1
Laboratories placed in main building.	1
Too small manual training room.	1
Too small commercial department	1
Poorly ventilated locker rooms.	1

TABLE III

Frequency of Replies to Question No. 3

Replies	Frequency
a. Select a good clerk (Lawyer))	
b. Select a good architect)	3
c. Select a good principal)	
Visit as many high school buildings as possible and obtain views of those who have had experience in building township high schools	2
Elect a principal who is amply informed on high school work, building, and equipment	2
Board, Clerk, architect, and principal should visit schools with a view to: (a) plan, (b) construction, (c) material, (d) cost of plant.	2
Make survey of community in which schools is to be established. Build accordingly.	2
Issue sufficient bonds	2
Consult High School Visitor's Office frequently.	2
Make campaign to educate the people into an appreciation of what other districts have in the line of a modern school.	2
Be prepared to take advantage of the provisions of the Smith-Hughes Bill	1
Proceed legally and keep complete records for possible later use	1
Secure an architect who is a specialist in school building, with local architect as adviser	1
Work out various departments in conjunction with a specialist.	1
Put an experienced teacher of agriculture on the faculty at once to work among the farmers with a view to determining the needs for equipping the Agricultural Department as this will help to tear down prejudice where greatest amount is now found.	1
Insist upon a large enough bond issue to build adequately for years to come	1

TABLE III, continued.

Frequency of Replies to Question No. 3

Replies	Frequency
When building plans have been decided upon tentatively, submit them for criticisms to three Illinois Principals who have recently had building experience	1
Submit heating and ventilation systems and plans to some competent and <u>independent</u> consulting engineer.	1
Select architect early enough that he may be helpful in the determination of site.	1
Build for at least ten years in the future	1

Because of the importance of the reply made by the State Supervisor of High Schools to the third question it is hereby given in full:

"Section 86 of the school law indicates that if a majority of the votes for establishing a township high school are in favor thereof then there must be a special election called by the township trustees on any Saturday within sixty days for the purpose of electing a township high school board of education to consist of five members.

"After this election these five members are to meet and determine by lot at their first meeting the length of term each is to serve. Two are to serve for one year, two for two years, and one for three years from the second Saturday of April next preceding their election and their successors are elected thereafter each to serve for three years.

"The same section provides for filling vacancies and procedure and form of ballot and gives instructions in regard to the petitions and the kind of election to be held and all that sort of thing.

"The last paragraph in Section 86 provides that within ten days after their election the members of the township high school board of education shall meet and organize by electing one of their

members president and by electing a secretary. This secretary may or may not be a member of their board. The paragraph goes on as follows:

'It shall be the duty of such high school board of education to establish at some central point most convenient to a majority of the pupils of the township, a high school for the education of the more advanced pupils.'

"It should be the duty of the board of education of a township high school just organized in this way to select and employ a principal as early as possible so that they may have the benefit of his experience and skill in such matters as belong to the early part of the work of organizing the school. For example, in determining what the possible or probable enrollment is likely to be for the ensuing year in each of the four grades of a high school and thus to determine what teaching force and what equipment as well as what space for conducting classes will be necessary for the following year. A course of study should be carefully thought out and determined upon for the full four years.

"For suggestions and advice and official restrictions in regard to these matters it is wise in such cases for the board to communicate with the State Supervisor of High Schools at the earliest possible moment setting forth fully the situation and the problems which are facing them as to the organization and equipment of the school and the course of study.

"When these matters are taken care of an estimate should be made of the necessary expenditures for the building or in the matter of salaries for teachers, equipment for the school, fuel, janitor and other items of maintenance. The board should then prepare an estimate of the levy to be mounted in a certificate according to the provisions of Sections 189 and 190, and filed with the township treasurer. This should indicate, separately, the amount required for the next year as a special tax for "educational purposes" which means maintenance of the school, and separately, what is required as a special tax for building purposes.

"In order to do this intelligently it would be necessary for the board to inform itself exactly of the total equalized assessed valuation of all the taxable property within its district. This information can be secured from the county clerk and indeed it is wise and proper that a map indicating the boundaries of the district and showing the subordinate districts included should be filed with that county clerk as soon as the election for establishing the district is held.

"In case there is no building available which could be used temporarily by rental or by purchase the question will arise immediately as to the erection of a building and any action taken in regard to such matters should be taken only after a careful consideration of the needs of the district and the probable development of the school within a reasonable term of years. In planning

such a building even in its general features, the assistance of not only a competent architect but also of experienced high school men should be followed. Many good architects are not well qualified to determine such matters from an educational point of view and equally is it true that many excellent school men are not supplied with the technical knowledge that belongs to an architect. The two should cooperate together.

"If it should be determined that the erection of a building is necessary either immediately or after a short period then it would behoove the board of education to provide for the calling of an election for the voters of the district to determine upon a selection of a site for the erection of a building and the issuance of the necessary bonds to provide the money for that purpose.

"In all these matters it is necessary, in order to secure the future status of the school that close cooperation should be had with the Office of the Superintendent of Public Instruction so that when the school is established it may become, through a certificate from the State Superintendent, a recognized high school in the meaning of that term as defined by the Illinois statute. Full information as to how these steps shall be taken for recognition can be secured from that office. Circular 135 issued by the State Superintendent gives general information regarding the matter of becoming a recognized high school and the relation between such a district and a non-high school district of the county whose board is authorized to pay tuition to a township high school board for any pupils attending such school from a non-high school district. That circular also contains the numbers of all other publications issued by the State Superintendent's office in regard to the establishment and supervision of recognized high schools in the State of Illinois and blanks are furnished with full instructions for making the necessary application.

"This matter is important from the beginning so that the purchase of equipment and the arrangement of the course of study and the organization of the school in general may be made to conform to these requirements established by the State Superintendent under the statute.

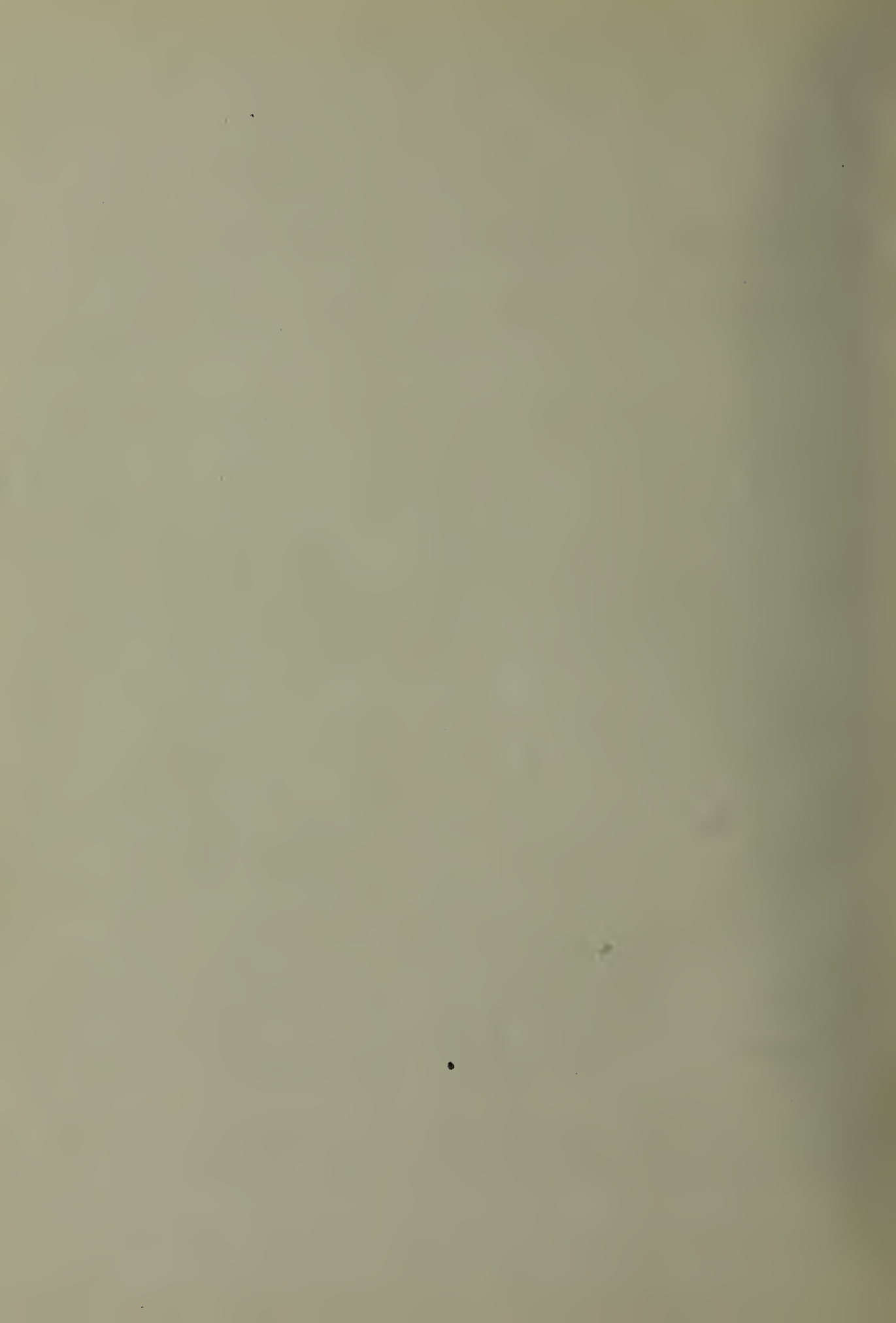
(Signed) John Calvin Hanna

Supervisor of High Schools

CONCLUSION

The brevity of this thesis is not due to the exhaustion of the subject, by any means, but due to the feeling that brevity will contribute more fully to its usefulness.

This thesis is written with the hope that what has been contributed herein may find its way into the hands of every community board of education, that it may serve in suggesting the many important items that should be carefully considered; that it may prevent many errors that otherwise are likely to be made, thus increasing high school efficiency; that it may serve to point out both commendable and objectionable practice in existing school systems; and also that it may stimulate greater effort toward standardization in school practice.



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